

REMARKS

Reconsideration of the Office Action mailed May 21, 2003, (hereinafter "instant Office Action") and withdrawal of the rejection of claims 16-26 and 36, are respectfully requested.

In the instant Office Action, claims 16-26 and 36-38 are listed as pending, claims 37 and 38 are listed as allowed and claims 16-26 and 36 are listed as rejected.

Attached hereto as Appendix A entitled "**AMENDED CLAIMS**" is a complete set of the claims currently pending. Claim 16 has been amended to correct two typographical errors.

The Examiner has rejected claims 16-26 and 36 under 35 U.S.C. §112, first paragraph, as allegedly containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicants respectfully traverse this rejection. Applicants maintain the arguments presented in the Reply mailed November 26, 2001, the Preliminary Amendment filed concurrently with the Continued Prosecution Application Request filed on September 27, 2002 and the Reply filed March 24, 2003.

The Examiner cites *Ruschig*, which is a case in which the Examiner suggested adding a claim to a specific compound in order to provoke an interference. Ultimately it was found that there was no support in the specification for this specific compound. In the instant application, however, Applicants have by contrast, amended Claim 16 to exclude compounds. Applicants are not trying to broaden the claims by adding compounds. The Examiner refers to "[t]he blaze mark test" of providing guidance to lead one skilled in the art to the sub-genus and states that "Here, the exclusion of the compounds occurs only after the prior art has been found." The patent law provides for the amendment of claims during prosecution. As stated in *In re Wertheim*, 541 F.2d 257:

Since the patent law provides for amendment during prosecution of claims, as well as the specification supporting claims, 35 USC 132, it is clear that the reference to "particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention" in the second paragraph of 35 USC 112 does not prohibit the applicant from changing what he "regards as his invention" (i.e., the subject matter on which he seeks patent protection) during the pendency of his application. Cf. *In re Brower*, 58 CCPA 724, [728] 433 F.2d 813, 817, 167 USPQ 684, 687 (1970)

For an Applicant to exclude specific compounds from his claims in order to patentably distinguish his invention from the prior art has been a long accepted practice within the USPTO. As stated in *Werheim*, (supra), "To rule otherwise would let form triumph over substance, substantially eliminating the right of an applicant to retreat to an otherwise patentable species merely because he erroneously thought he was first with the genus when he filed". Cf. *In re Ruff*, 45 CCPA 1037, 1049, 256 F.2d 590, 597, 118 USPQ 340, 347 (1958). In the instant case, Applicants are merely excising a small group of compounds in order to distinctly claim their invention.

The Examiner further reasons that "...there is no way for one skilled in the art to know that these compounds will be excluded." Applicants submit that it is the claims which define the "metes and bounds" of the invention, not the specification. By reading the claim, one skilled in the art would understand the boundaries of the invention. The amendment to claim 16 allows Applicants to "particularly pointing out and distinctly claimed the subject matter" which they regard as their invention, as required by 35 U.S.C. §112, second paragraph.

The Examiner further states "Even if we assume that applicants did have the possession of the invention, the criterion of possession alone is insufficient to determine whether the application has been the written description requirement." Applicants respectfully direct the Examiner's attention to M.P.E.P. §2163, which states:

If a skilled artisan would have understood the inventor to be in possession of the claimed invention at the time of filing, **even if every nuance of the claims is not explicitly described in the specification, then the adequate description requirement is met.** See, e.g. *Vas-Cath*, 935 F.2d at 1563, 19 USPQ2d at 1116; *Martin v. Johnson*, 454 F.2d 746, 751, 172, USPQ 391, 395 (CCPA 1972) (emphasis added)

Applicants' written description, through text, formulas and working examples, convey that Applicants has possession of the invention at the time the instant application was filed. As discussed above, amending claim 16 to overcome 35 U.S.C. §102(b) rejections serves to patentably distinguish Applicants' invention from the prior art. Such amendments are permitted under 35 U.S.C. §132. Further, "[T]he 'essential goal' of the description of the invention requirement is to clearly convey the information that an applicant has invented **the subject**

matter which is claimed.” (emphasis added) In re Barker, 559 F.2d 588, 592 n.4, 194 USPQ 470, 473 n.4 (CCPA 1997). With the amendment of Claim 16, Applicants are only claiming that subject matter which they have invented. Therefore, the instant specification meets the requirements of written description under 35 U.S.C. §112, first paragraph.

Based upon the foregoing, the rejection of claims 16-26 and 36 under 35 U.S.C. §112, first paragraph, is obviated and should be withdrawn.

The Examiner has rejected claims 16-26 under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner alleges that it is unclear as to the nature and number of substituent(s) intended and that claim 16 is vague and indefinite in that the metes and bounds of “a substituent” for R2 is unknown. Applicants respectfully traverse this rejection. Applicants maintain the arguments presented in the Replies filed November 26, 2001 and March 24, 2003 and the Request for Continued Prosecution filed September 27, 2002.

The test for definiteness under 35 U.S.C. §112, second paragraph, is whether “those skilled in the art would understand what is claimed when read in light of the specification”. Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1576, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986). A clear example of the extent of reliance on the knowledge of those skilled in the art is give in Orthokinetics (supra):

It is undisputed that the claims require that one desiring to build and use a travel chair must measure the space between the selected automobile's doorframe and its seat and then dimension the front legs of the travel chair so they will fit in that particular space in that particular automobile. Orthokinetics' witnesses, who were skilled in the art, testified that such a task is evident from the specification and that one of ordinary skill in the art would easily have been able to determine the appropriate dimensions.

The claims were intended to cover the use of the invention with various types of automobiles. That a particular chair on which the claims read may fit within some automobiles and not others is of no moment. The phrase “so dimensioned” is as accurate as the subject matter permits, automobiles being of various sizes. See Rosemount, Inc. v. Beckman Instruments, 727 F.2d 15400, 1547, 221 USPQ (BNA) 1, 7 (Fed. Cir. 1984). As long as those of ordinary skill in the art realized that the dimensions could be easily obtained, 35 U.S.C. § 112, second paragraph, requires nothing more. The patent law does not require that all possible lengths corresponding to

the spaces in hundreds of different automobiles be listed in the patent, let alone that they be listed in the claims.

The question of the dimensions of the travel chair in Orthokinetics is analogous to the question of which substituents can be used in the instant application. That is, the foregoing case provides support to Applicants' position that the patent law does not require that all possible substituents be listed for a compound. One of ordinary skill in the art would realize that suitable substituents could be determined by referencing the examples provided and utilizing the assays contained in the instant specification to determine whether the substituted compound in question would fall within Applicants' claims.

Further, the term "substituted" is a well-known term which is understood by one of ordinary skill in the art. Furthermore, Applicants have provided the description for routine assays to determine the activity of a compound as well as listing preferred compounds and preferred examples. Thus, as long as a substitution as taught and enabled by the instant application in view of the art results in a compound that is chemically stable and shows the desired activity, such a compound would fall within Applicants' definition of "substituted".

One of ordinary skill in the art has been provided with sufficient enabling guidance as to which substituents would be suitable, as the nature and number of substituent(s) would be limited by the structure of the compound and the availability of binding sites. Applicant maintains that one skilled in the art is familiar with the above-noted terms and that the specification is fully enabling with respect to the terms objected to by the Examiner.

As stated in M.P.E.P. 2173.04, "Breadth of a claim is not to be equated with indefiniteness." In re Miller, 441 F.2d 689, 169, USPQ 597 (CCPA 1971). Furthermore, In re Borkowski, 57 CCPA 946; 422 F.2d 904; 1970 CCPA declares "If the scope of the subject matter embraced by the claims is clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, then the claims comply with 35 U.S.C. 112, second paragraph."

No fees are due for the instant amendment since the total number of claims after entry of the amendments hereinabove is not more than the total number of claims that Applicants have paid for to date.

Based upon the foregoing, Applicants believe that claims 16-26 and 36-38 are in condition for allowance. Prompt and favorable action is earnestly solicited.

If the Examiner believes that a telephone conference would advance the condition of the instant application for allowance, Applicants invite the Examiner to call Applicants' agent at the number noted below.

Respectfully submitted,

Date: September 22, 2003

Gayle B. O'Brien

Gayle B. O'Brien
Agent for Applicants
Reg. No. 48,812

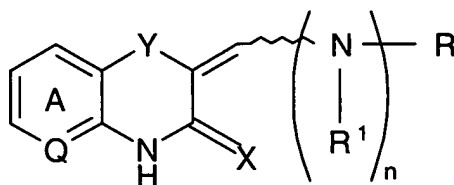
Abbott Bioresearch Center
100 Research Drive
Worcester, MA 01605
(508) 688-8053

APPENDIX A

AMENDED CLAIMS

Claims 1- 15 (Cancelled)

Claim 16 (Currently Amended): A compound represented by the following structural formula:



or physiologically acceptable salts thereof, wherein:

ring A is substituted with suitable substituents or unsubstituted;

Q is $-N=$ or $-CR^2=$;

X is S, O or NOR^3 ;

Y is $-S-$, $-SO-$ or $-SO_2-$

R^2 is $-H$ or a substituent;

R^3 is $-H$ or $-C(O)R^4$;

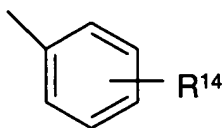
R^4 is a substituted with suitable substituents or unsubstituted aliphatic or aromatic group;

n is 0 or 1; and wherein

when X is S or NOR^3 , R is an optionally substituted with suitable substituents aromatic or aralkyl group and R^1 is hydrogen or a substituted with suitable substituents or unsubstituted aliphatic group;

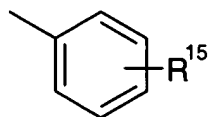
when X is O and n is 0, R^1 is hydrogen or a substituted with suitable substituents or unsubstituted aliphatic group and R is a substituted with suitable substituents or unsubstituted aromatic or aralkyl group, provided that R is not 2-thienyl, benzoxadiazolyl, 4-oxo-4H-1-benzopyran-3-yl, 6-chloro-4-oxo-4H-1-benzopyran-3-yl, 6-methyl-4-oxo-4H-1-benzopyran-3-yl, 6-acetyloxy-4-oxo-4H-1-benzopyran-3-yl, naphthyl, 3-furanyl, 2-furanyl, 2-pyridyl, 3-pyridinyl, 4-pyridyl, 2,4-dichlorophenyl, 2,6-

dichlorophenyl, 4-acetyloxy-3-methoxyphenyl, 3,5-dimethoxyphenyl, 3,4,5-trimethoxyphenyl, 3,5-*t*-butyl-4-hydroxyphenyl, 3,5-*i*-propyl-4-hydroxyphenyl, 3-(2-hydroxyphenyl)-1H-pyrazol-4-yl, 3-(5-chloro-2-hydroxyphenyl)-1H-pyrazol-4-yl, or



where R¹⁴ is H, *p*-F, *o*-Cl, *p*-Cl, *p*-Br, *m*-Br, *o*-CH₃, *p*-CH₃, *p*-OCH₂CH₃, -O-Benzyl, CF₃, phenyl, -OCH₃, -O-phenyl, NO₂, -OC(O)CH₃, OCH₂C(O)C₂H₅, -OCH₂C(O)NHNH₂, *p*-(-O-(CH₂)₅-N(CH₃)₂), *p*-(-O-(CH₂)₃-N(n-C₃H₇)₂), *p*-(3-piperidin-1-yl-propan-1-oxy), *m*-(2-morpholin-4-yl-ethan-1-oxy), or *m*-(4-(4-ethyl-piperazin-1-yl)-butan-1-oxy); and

when X is O and n is 1, R¹ is H or a substituted with suitable substituents or unsubstituted aliphatic group and R is a substituted with suitable substituents or unsubstituted aromatic or aralkyl group, provided that R is not 4-nitro-2-methoxyphenyl, 4-methoxy-2-nitrophenyl, 4-chloro-2-nitrophenyl, 2,5-dichlorophenyl, or



where R¹⁵ is H, Cl, *p*-NO₂, *o*-NO₂, *p*-OCH₃, *o*-CO₂H, CH₃ or CF₃.

Claim 17 (Original): A compound of Claim 16, wherein the aromatic group and the aromatic portion of the aralkyl group defined for R is a heteroaryl group.

Claim 18 (Original): A compound of Claim 17 wherein n is 0 and R is selected from the group consisting of substituted or unsubstituted indole, pyrrole, 7-azaindole, pyrazole, imidazole and indazole.

Claim 19 (Original): A compound of Claim 16, wherein n is 1 and R is selected from the group consisting of substituted or unsubstituted indole, pyrazolyl, phenyl, triazolyl, pyridyl and indazolyl.

Claim 20 (Previously Amended): A compound of Claim 18, wherein Q is CH₂; Y is S; and R is selected from the group consisting of substituted or unsubstituted pyrrole, pyrazole, imidazole, oxazole, isoxazole, thiazole, isothiazole, triazole, tetrazole, indole, 7-azaindole, indazole, purine, pyrrolo-pyrimidine, pyrazolo-pyrimidine, imidazo-pyridine, imidazo-pyrimidine, imidazo-pyridine, pyrrolo-pyridine, pyrrolo-pyrimidine, pyrrolo-quinoline, pyrrolo-pyrazine, and 6,7,8,9-tetrahydropyrido-indole.

Claim 21 (Previously Amended): A compound according to Claim 20, wherein R is selected from the group consisting of substituted or unsubstituted pyrrole, pyrazole, imidazole, oxazole, isoxazole, thiazole, isothiazole, triazole, tetrazole, indole, 7-azaindole, indazole, purine, pyrrolo[2,3-d]pyrimidine, pyrazolo[3,4-d]pyrimidine, imidazo[4,5-d]pyridine, imidazo[1,2-a]pyrimidine, imidazo[1,2-a]pyridine, pyrrolo[3,2-b]pyridine, pyrrolo[3,2-c]pyridine, pyrrolo[2,3-c]pyridine, pyrrolo[3,2-b]quinoline, pyrrolo[2,3-b]pyrazine, and 6,7,8,9-tetrahydropyrido[1,2-a]indole.

Claim 22 (Original) A compound of Claim 21 wherein R is optionally substituted with one or more moieties selected from the group consisting of halogens, trihalomethyl, cyano, hydroxy, nitro, -NR⁵R⁶, carbamoyl, carboxy, carboxamidoxime, -SO₂NR⁵R⁶, -NHSO₂R⁵, R⁷-O-R⁸-, R⁷-O-R⁸-O-R⁹-, R¹¹-, R¹¹O-, R¹¹OC(O)-, R¹¹N(R⁵)C(O)-, R¹¹C(O)-, R¹¹C(O)O-, R¹¹S-, R¹¹S(O)-, R¹¹S(O)₂-, (R⁵R⁶)NC(O)-, R¹¹(R⁵)NC(O)N(R⁵)-, R¹¹C(O)N(R⁵)-, R¹²(CH₂)_m-, R¹²(CH₂)_mC(O)N(R⁵)-, R¹²(CH₂)_mO-, R¹²(CH₂)_mN(R⁵)-, [R¹²(CH₂)_m]₂CH-O-(CH₂)_m-, R¹²(CH₂)_mOC(O)-, R¹²(CH₂)_mN(R⁵)C(O)-, R¹²(CH₂)_mCH(R¹²)(CH₂)_m-, R¹²(CH₂)_mC(O)O-, R¹²(CH₂)_mN(R⁵)C(O)O-, R¹²(CH₂)_mOC(O)N(R⁵)-, R¹²(CH₂)_mOC(O)O-, R¹²(CH₂)_mN(R⁵)C(O)(CH₂)_m-, R¹²(CH₂)_mOC(O)(CH₂)_m-, R¹²(CH₂)_m(CR⁵R⁶)_m(CH₂)_mN(R⁵)(CH₂)_m-, R¹²(CH₂)_mC(O)-, R¹²C(O)(CH₂)_m-, R¹²(CH₂)_m(CR⁵R⁶)_m(CH₂)_mN(R⁵)C(O)(CH₂)_m-, R¹²(CH₂)_m(CR⁵R⁶)_m(CH₂)_mN(R⁵)(CH₂)_mC(O)-, [R¹²(CH₂)_m]₂NC(O)(CH₂)_m-, R¹²(CH₂)_mC(O)-, R¹²(CH₂)_m(CR⁵R⁶)_m(CH₂)_mN(R⁵)SO₂-, R¹²(CH₂)_m(CR⁵R⁶)_m(CH₂)_mO(CH₂)_m-,

wherein:

R^5 and R^6 for each occurrence are each independently selected from the group consisting of hydrogen, a lower alkyl, benzyl, heteroarylmethyl and aryl group optionally substituted with a halogen, cyano or hydroxy group;

R^7 for each occurrence is independently selected from the group consisting of hydrogen, $R^{10}C(O)-$, a lower alkyl and an aryl group optionally substituted with one or more halogens, cyano, hydroxy or $-NR^5R^6$;

R^8 and R^9 for each occurrence are each independently selected from the group consisting of $-C(O)-$, a lower alkyl or an aryl group optionally substituted with one or more halogens, cyano, hydroxy or $-NR^5R^6$;

R^{10} for each occurrence is independently selected from a group consisting of a lower alkyl and an aryl group optionally substituted with one or more halogens, cyano, hydroxy or $-NR^5R^6$;

R^{11} for each occurrence is independently hydrogen or selected from an optionally substituted group consisting of a lower alkyl group, a saturated or unsaturated heterocyclic ring, an aryl group and an aralkyl group, where said groups are optionally substituted with one or more halogens, cyano, hydroxy or $-NR^5R^6$;

R^{12} for each occurrence is independently selected from the group consisting of halogen, carboxy, carbamoyl, lower alkyloxycarbonyl, lower alkenyl, hydroxy, a lower alkyloxy, a lower alcanoyloxy, and $-NR^5R^6$; or is selected from an optionally substituted group consisting of morpholine, piperazine, piperidine, pyrrolidine, homopiperazine, pyridine, triazole, tetrazole, imidazole and tetrahydropyran, where said groups are optionally substituted with one or more hydroxy, lower alkyl, lower alkyloxy, lower hydroxyalkyl, lower aminoalkyl, lower alkyloxyalkyl, a saturated or unsaturated heterocyclic ring, cycloalkyl or $-NR^5R^6$ group; and

m is independently an integer from 0 to 4.

Claim 23 (Original): A compound of Claim 22, wherein X is O and n is 0.

Claim 24 (Original): A compound of Claim 22, wherein X is S.

Claim 25 (Original): A compound of Claim 22, wherein X is NOR_3 .

Claim 26 (Original): A compound of Claim 23 wherein R is selected from the group consisting of:

pyrrol-2-yl,
5-methylpyrrol-2-yl,
3,5-dimethylpyrrol-2-yl,
4,5-dimethylpyrrol-2-yl,
4-ethyl-3,5-dimethylpyrrol-2-yl,
4-ethoxycarbonyl-3,5-dimethylpyrrol-2-yl,
1-methylpyrrol-2-yl,
1-(4-hydroxybutyl)pyrrol-2-yl,
1-(2-hydroxyethyl)pyrrol-2-yl,
1-(3-dimethylaminopropyl)pyrrol-2-yl,
4-bromopyrrol-2-yl,
1-[N-(2-morpholinoethyl)carbamoylmethyl]pyrrol-2-yl,
1-(ethoxycarbonylmethyl)pyrrol-2-yl,
1-(carboxymethyl)pyrrol-2-yl,
1-[N-(3-dimethylaminopropyl)carbamoylmethyl]pyrrol-2-yl,
1-[(4-methylpiperazin-1-yl)carbonylmethyl]pyrrol-2-yl,
indol-3-yl,
1-(4-hydroxybutyl)indol-3-yl,
5-methoxyindol-3-yl,
1-(2-hydroxyethyloxymethyl)indol-3-yl,
1-(3-dimethylaminopropyl)indol-3-yl,
6-methoxycarbonylindol-3-yl,
2-methylindol-3-yl,
1-methylindol-3-yl,
1-isopropylindol-3-yl,
1-(2-hydroxy-3-dimethylaminopropyl)indol-3-yl,
5-hydroxyindol-3-yl,
6-carboxyindol-3-yl,
5-amino-2-methylindol-3-yl,
6-(2-dimethylaminoethyloxycarbonyl)indol-3-yl,

6-(2-morpholinoethyloxycarbonyl)indol-3-yl,
6-(3-dimethylaminopropylcarbonyl)indol-3-yl,
1-(carbonylmethyl)indol-3-yl,
8-hydroxymethyl-6,7,8,9-tetrahydropyrido[1,2-a]indol-10-yl,
1-(ethoxycarbonylmethyl)indol-3-yl,
4-methoxycarbonylindol-3-yl,
1-(2-ethoxycarbonyl)indol-3-yl,
7-methoxycarbonylindol-3-yl,
2-ethoxycarbonylindol-3-yl,
1-cyclopentylindol-3-yl,
1-(3-tetrahydrofuryl)indol-3-yl,
6-(N,N-dimethylaminosulfonyl)indol-3-yl,
5-(acetylaminomethyl)indol-3-yl,
1-(diethylcarbonyl)indol-3-yl,
5-hydroxy-1-methylindol-3-yl,
6-methoxyindol-3-yl,
6-hydroxyindol-3-yl,
6-[2-(pyrrolidin-1-yl)ethyloxycarbonyl]indol-3-yl,
6-(2-dimethylaminoethyloxycarbonyl)-1-methylindol-3-yl,
6-(3-dimethylaminopropyloxycarbonyl)indol-3-yl,
6-carboxy-1-(2-hydroxyethyl)indol-3-yl,
6-{N-[2-(pyrrolidin-1-yl)ethyl]carbonyl}indol-3-yl,
6-[N-(2-morpholinoethyl) carbonyl]indol-3-yl,
6-[N-(2-dimethylaminoethyl)carbonyl]indol-3-yl,
6-{N-[3-(4-methylpiperazin-1-yl)propyl]carbonyl}indol-3-yl,
6-{N-[2-(piperidin-1-yl)ethyl]carbonyl}indol-3-yl,
6-[N-(2-dimethylaminopropyl)carbonyl]indol-3-yl,
6-{[N-(2-dimethylaminoethyl)-N-methyl]carbonyl}indol-3-yl ,
6-[(4-methylpiperazin-1-yl)carbonyl]indol-3-yl,
5-[2-(piperidin-1-yl)ethoxy]indol-3-yl,
5-(3-dimethylaminopropoxy)indol-3-yl,
5-(2-morpholinoethoxy) indol-3-yl,

5-(3-dimethylaminopropoxy)-1-(isopropoxycarbonyl)indol-3-yl,
5-(3-dimethylaminopropoxy)-1-methylindol-3-yl,
5-(2-morpholinoethoxy)-1-methylindol-3-yl,
5-[2-(pyrrolidin-1-yl)ethoxy]indol-3-yl,
5-(2-dimethylaminoethoxy)indol-3-yl,
6-(3-dimethylaminopropoxy)indol-3-yl,
6-(2-morpholinoethoxy)indol-3-yl,
6-[2-(piperidin-1-yl)ethoxy]indol-3-yl,
6-[2-(pyrrolidin-1-yl)ethoxy]indol-3-yl,
6-(2-dimethylaminoethoxy)indol-3-yl,
6-[(2-dimethylamino-2-methyl)propoxy]indol-3-yl,
6-[2-(1-methylpyrrolidin-2-yl)ethoxy]indol-3-yl,
6-[2-(1-methylpiperidin-3-yl)methoxy]indol-3-yl,
7-(dimethylaminomethyl)-6-hydroxyindol-3-yl,
7-(dimethylaminomethyl)-6-(2-morpholinoethoxy)indol-3-yl,
2-methyl-5-(N'-ethylureido)indol-3-yl,
2-methyl-5-(p-toluensulfonylamino)indol-3-yl,
6-[(3-dimethylaminopropyl)aminomethyl]indol-3-yl,
6-[(2-methoxyethyl)aminomethyl]indol-3-yl,
1-(carboxymethyl)indol-3-yl,
1-[N-(2-morpholinoethyl)carbamoylmethyl]indol-3-yl,
1-[N-(2-methoxyethyl)carbamoylmethyl]indol-3-yl,
1-[N-(3-dimethylaminopropyl)carbamoylmethyl]indol-3-yl,
1-[N-(2-(2-pyridyl)ethyl)carbamoylmethyl]indol-3-yl,
1-[N-[2-(pyrrolidin-1-yl)ethyl]carbamoylmethyl]indol-3-yl,
7-[N-(3-dimethylaminopropyl)carbamoyl]indol-3-yl,
1-[(4-methylpiperazin-1-yl)carbonylmethyl]indol-3-yl,
1-[N,N-bis(2-N',N'-diethylaminoethyl)carbamoylmethyl]indol-3-yl,
1-[(4-piperidinopiperidin-1-yl)carbonylmethyl]indol-3-yl,
1-[[N-(2-N',N'-diethylaminoethyl)-N-methyl]carbamoylmethyl]indol-3-yl,
7-carboxyindol-3-yl,
7-[(4-methylpiperazin-1-yl)carbonyl]indol-3-yl,

7-{[4-(2-hydroxyethyl)piperazin-1-yl]carbonyl}indol-3-yl,
7-azaindol-3-yl,
1-(4-hydroxybutyl)-7-azaindol-3-yl,
1-(2-hydroxyethyloxymethyl)-7-azaindol-3-yl,
1-(3-dimethylaminopropyl)-7-azaindol-3-yl,
1-(2-morpholinoethyl)-7-azaindol-3-yl,
1-(4-acetoxybutyl)-7-azaindol-3-yl,
1-(2-hydroxyethyl)-7-azaindol-3-yl,
1-methyl-7-azaindol-3-yl,
1-methoxymethyl-7-azaindol-3-yl,
1-(2-dimethylaminomethyl)-7-azaindol-3-yl,
1-(ethoxycarbonylmethyl)-7-azaindol-3-yl,
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1-[(4-ethylpiperazin-1-yl)carbonylmethyl]-7-azaindol-3-yl,
1-[(4-piperidinopiperidin-1-yl)carbonylmethyl]-7-azaindol-3-yl,
1-[N,N-bis(2-N',N'-diethylaminoethyl)carbamoylmethyl]-7-azaindol-3-yl,
7-benzyloxy pyrrolo[2,3-c]pyridin-5-yl,
7-hydroxy pyrrolo[2,3-c]pyridin-5-yl,
1-(2-dimethylaminoethyl)-7-hydroxy pyrrolo[2,3-c]pyridin-5-yl,
imidazol-2-yl,
4-trifluoromethylimidazol-2-yl,
4-cyanoimidazol-2-yl,
1-methyl-1H-benzo[d]imidazol-2-yl,
imidazol-5-yl,
4(5)-methylimidazol-5(4)-yl,
2-methylimidazol-5-yl,

2-ethyl-4(5)-methylimidazol-5(4)-yl,
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1-(2-diethylaminoethyl)-4-methylimidazol-5-yl,
1-(2-morpholinoethyl)-4-methylimidazol-5-yl,
3-(2-morpholinoethyl)-4-methylimidazol-5-yl,
1-methyl-2-methylthioimidazol-5-yl,
4(5)-methoxycarbonylimidazol-5(4)-yl,
4(5)-hydroxymethylimidazol-5(4)-yl,
furan-3-yl,
thien-3-yl,
3-methylpyrazol-4-yl,
3-phenylpyrazol-4-yl,
1-(2-diethylaminoethyl)-3-methylpyrazol-4-yl,
1-(2-diethylaminoethyl)-5-methylpyrazol-4-yl,
1-(2-morpholinoethyl)-3-methylpyrazol-4-yl,
1-(2-morpholinoethyl)-5-methylpyrazol-4-yl,
1-methylpyrazol-4-yl,
1-tert-butylpyrazol-4-yl,
1-ethoxycarbonylmethyl-3-methylpyrazol-4-yl,
1-ethoxycarbonylmethyl-5-methylpyrazol-4-yl,
1-carboxymethyl-3-methylpyrazol-4-yl,
1-carboxymethyl-5-methylpyrazol-4-yl,
1-[N-(2-dimethylaminoethyl)carbamoylmethyl]-3-methylpyrazol-4-yl,
1-{N-[3-(4-methylpiperazin-1-yl)propyl]carbamoylmethyl}-3-methylpyrazol-4-yl,
1-[N-(2-dimethylaminoethyl)carbamoylmethyl]-5-methylpyrazol-4-yl,
1-[N-(2-morpholinoethyl)carbamoylmethyl]-3-methylpyrazol-4-yl,
1-[(4-piperidinopiperidin-1-yl)carbonylmethyl]-3-methylpyrazol-4-yl,
1-{[N-(2-N',N'-diethylaminoethyl)-N-methyl]carbamoylmethyl}-3-methylpyrazol-4-yl,
1-[(4-methylpiperazin-1-yl)carbonylmethyl]-5-methylpyrazol-4-yl,
1-[(4-methylpiperazin-1-yl)carbonylmethyl]-3-methylpyrazol-4-yl,
1-{N-[3-(imidazol-1-yl)propyl]carbamoylmethyl}-3-methylpyrazol-4-yl,
1-{[4-(2-hydroxyethyl)piperazin-1-yl]carbonylmethyl}-5-methylpyrazol-4-yl,

1-{[4-(2-(2-hydroxyethoxy)ethyl)piperazin-1-yl]carbonylmethyl}-5-methylpyrazol-4-yl,
indol-2-yl,
pyrrol-3-yl,
indazol-3-yl,
thiazol-2-yl,
pyrazol-3-yl,
5(3)-ethoxycarbonylpyrazol-3(5)-yl,
5(3)-[N-(2-morpholinoethyl)carbamoyl]pyrazol-3(5)-yl,
5(3)-[N-(2-methoxyethyl)carbamoyl]pyrazol-3(5)-yl,
5(3)-{N-[2-(pyrrolidin-1-yl)ethyl]carbamoyl}pyrazol-3(5)-yl,
5(3)-[N-(3-dimethylaminopropyl)carbamoyl]pyrazol-3(5)-yl,
2-(dimethylamino)thiazol-5-yl,
indol-4-yl,
3-(morpholinomethyl)indol-4-yl,
indol-7-yl,
3-(dimethylaminomethyl)indol-7-yl,
3-(morpholinomethyl)indol-7-yl,
3-(piperidinomethyl)indol-7-yl,
3-[(4-methylpiperazin-1-yl)methyl]indol-7-yl,
3,5-dimethyl-4-dimethylaminomethylpyrrol-2-yl,
4-carboxyimidazol-2-yl,
7-{N-[3-(imidazol-1-yl)propyl]carbamoyl}indol-3-yl,
7-{N-[3-(4-methylpiperazin-1-yl)propyl]carbamoyl}indol-3-yl,
7-[N-(2-dimethylaminopropyl)carbamoyl]indol-3-yl,
7-{N-[2-(pyrrolidin-1-yl)ethyl]carbamoyl}indol-3-yl,
7-[(4-ethylpiperazin-1-yl)carbonyl]indol-3-yl,
7-[(4-methylhomopiperazin-1-yl)carbonyl]indol-3-yl,
3-{[4-(2-hydroxyethyl)piperazin-1-yl]methyl}indol-7-yl,
3-[(4-hydroxypiperidin-1-yl)methyl]indol-7-yl,
1-[(piperazin-1-yl)carbonylmethyl]-7-azaindol-3-yl,
1-[(piperazin-1-yl)carbonylmethyl]indol-3-yl,
1-[(piperazin-1-yl)carbonylmethyl]-3-methyl-1H-pyrazol-4-yl,

1-{N-[2-(pyrrolidin-1-yl)ethyl]carbamoylmethyl}-3-methyl-1H-pyrazol-4-yl,
1-[N-(2-dimethylaminopropyl)carbamoylmethyl]-3-methyl-1H-pyrazol-4-yl,
3-(2-dimethylaminoacetyl)indol-7-yl,
6-[(2-morpholinoethyl)aminomethyl]indol-3-yl,
6-{[2-(pyrrolidin-1-yl)ethyl]aminomethyl}indol-3-yl,
6-[(3-methoxycarbonylpropyl)oxy]indol-3-yl,
6-{[(3-(4-methylpiperazin-1-yl)carbonyl]propyloxy}indol-3-yl,
6-{3-[N-(2-dimethylaminoethyl)-N-methylcarbamoyl]propyloxy}indol-3-yl,
6-[(2-hydroxyethyl)oxymethyloxy]indol-3-yl,
6-{3-[(4-piperidinopiperidin-1-yl)carbonyl]propyloxy}indol-3-yl,
6-{3-{[4-(2-hydroxyethyl)piperazin-1-yl]carbonyl}propyloxy}indol-3-yl,
6-[(4-methylpiperazin-1-yl)methyl]indol-3-yl,
6-{[N-(2-dimethylaminoethyl)-N-methyl]aminomethyl}indol-3-yl,
7-(dimethylaminomethyl)-6-(2-methoxyethyloxy)indol-3-yl,
7-(dimethylaminomethyl)-6-(3-methoxycarbonylpropyloxy)indol-3-yl,
7-(dimethylaminomethyl)-6-{[3-(4-methylpiperazin-1-yl)carbonyl]propyloxy}indol-3-yl,
7-(dimethylaminomethyl)-6-[(2-hydroxyethyl)oxymethyloxy]indol-3-yl,
6-(2-methoxyethyloxy)-7-[(pyrrolidin-1-yl) methyl]indol-3-yl,
6-{[3-(4-methylpiperazin-1-yl)carbonyl]propyloxy}-7-[(pyrrolidin-1-yl) methyl]indol-3-yl,
6-[(2-hydroxyethyl)oxymethyloxy]-7-[(pyrrolidin-1-yl)methyl]indol-3-yl,
7-[[[(pyrrolidin-1-yl)methyl]-6-{[2-(pyrrolidin-1-yl)ethyl]oxy}indol-3-yl,
6-[2-(pyrrolidin-1-yl)ethyloxy]-7-azaindol-3-yl,
6-(2-piperidinoethyloxy)-7-azaindol-3-yl,
6-[(2-dimethylamino-2-methyl)propyloxy]-7-azaindol-3-yl,
6[(2-hydroxyethyl)aminomethylcarbonyl]indol-3-yl,
6-{[2-(pyrrolidin-1-yl)ethyl]aminomethylcarbonyl}indol-3-yl,
6-[(2-diethylaminoethyl)aminomethylcarbonyl]indol-3-yl,
4-carbamoylimidazol-2-yl,
4(5)-methyl-2-(methylmercapto)imidazol-5(4)-yl,
4(5)-methyl-2-(methylsulfonyl)imidazol-5(4)-yl,
2-amino-4(5)-methyylimidazol-5(4)-yl,

4(5)-dimethylaminomethylimidazol-5(4)-yl,
4(5)-methylaminomethylimidazol-5(4)-yl,
4(5)-diethylaminomethylimidazol-5(4)-yl,
6-(N-methylaminosulfonyl)indol-3-yl,
6-[N-(3-dimethylaminopropyl)sulfonyl]indol-3-yl,
6-{N-[2-(pyrrolidin-1-yl)ethyl]aminosulfonyl}indol-3-yl,
6-{N-[2-piperidinoethyl]aminosulfonyl}indol-3-yl,
6-[N-(2-morpholinoethyl)aminosulfonyl}indol-3-yl,
6-{N-[2-(piperidinomethyl)aminosulfonyl}indol-3-yl,
6-{N-[3-(4-methylpiperazin-1-yl)propyl]aminosulfonyl}indol-3-yl,
7-[N-(2-morpholinoethyl)carbamoyl]indol-3-yl,
7-[N-(2-piperidinoethyl)carbamoyl]indol-3-yl,
7-[[N-(2-N',N'-diethylaminoethyl)-N-methyl]carbamoyl} indol-3-yl,
7-[N-(2-methoxyethyl)carbamoyl]indol-3-yl,
7-[(4-piperidinopiperidin-1-yl)carbonyl]indol-3-yl,
7-[(piperazin-1-yl)carbonyl]indol-3-yl,
7-{N-[(2,2,N',N'-tetramethyl)propyl]carbamoyl}indol-3-yl,
7-{N-[(1-ethylpyrrolidin-2-yl)methyl]carbamoyl}indol-3-yl,
7-{N-[2-(2-pyridyl)ethyl]carbamoyl}indol-3-yl,
6-{N-[2-(2-pyridyl)ethyl]carbamoyl}indol-3-yl,
6-[(4-piperidinopiperidin-1-yl)carbonyl]indol-3-yl,
6-[(piperazin-1-yl)carbonyl]indol-3-yl,
6-{N-[(2,2,N',N'-tetramethyl)propyl]carbamoyl}indol-3-yl,
6-{N-[(1-ethylpyrrolidin-2-yl)methyl]carbamoyl}indol-3-yl,
6-[(4-methylhomopiperazin-1-yl)carbonyl]indol-3-yl,
6-[(4-butylpiperazin-1-yl)carbonyl]indol-3-yl,
6-[(4-ethylpiperazin-1-yl)carbonyl]indol-3-yl,
6-{[4-(2-(pyrrolidin-1-yl)ethyl)piperidin-1-yl]carbonyl}indol-3-yl,
6-{[N-(3-dimethylamino)prop-2-yl]carbamoyl}indol-3-yl,
6-{N-[3-(imidazol-1-yl)propyl]carbamoyl}indol-3-yl,
6-{[4-(2-hydroxyethyl)piperazin-1-yl]carbonyl}indol-3-yl,
3-[(4-ethylpiperazin-1-yl)methyl]indol-7-yl,

3-[(pyrrolidin-1-yl)methyl]indol-7-yl,
3-[(4-methylhomopiperazin-1-yl)methyl]indol-7-yl,
3-(diethylaminomethyl)indol-7-yl,
3-{[N-(2-N'-dimethylaminoethyl)-N-methyl]aminomethyl}indol-7-yl,
3-[(4-piperidinopiperidin-1-yl)methyl]indol-7-yl,
3-(2-piperidinoacetyl)indol-7-yl,
3-[2-(pyrrolidin-1-yl)acetyl]indol-7-yl,
3-(2-diethylaminoacetyl)indol-7-yl,
3-[2-(4-methylpiperazin-1-yl)acetyl]indol-7-yl,
3-[2-(4-methylhomopiperazin-1-yl)acetyl]indol-7-yl,
3-(2-morpholinoacetyl)indol-7-yl,
3-{2-[(2-methoxyethyl)amino]acetyl}indol-7-yl,
3-{2-[(2-piperidinoethyl)amino]acetyl}indol-7-yl,
3-{2-{[3-(imidazol-1-yl)propyl]amino}acetyl}indol-7-yl,
6-[3-(carboxypropyl)oxy]indol-3-yl,
6-{3-[(4-methylhomopiperazin-1-yl)carbonyl]propyloxy}indol-3-yl,
6-[(2-homopiperidin-1-yl)ethyloxy]indol-3-yl,
6-[(2-diethylamino-1-methyl)ethyloxy]indol-3-yl,
6-{2-[(tetrahydropyran-2-yl)oxy]ethyloxy}indol-3-yl,
6-[(2-hydroxyethyl)oxy]indol-3-yl,
6-[2-(isopropoxy)ethyloxy]indol-3-yl,
6-[2-(methoxyethyl)oxy]indol-3-yl,
6-[(3-methoxypropyl)oxy]indol-3-yl,
6-[(3-methoxybutyl)oxy]indol-3-yl,
6-{[(N,N-diethylcarbamoyl)methyl]oxy}indol-3-yl,
7-[2-(piperidin-1-yl)ethyloxy]indol-3-yl,
7-[(2-homopiperidin-1-yl)ethyloxy]indol-3-yl,
7-[(2-diethylamino-1-methyl)ethyloxy]indol-3-yl,
7-{2-[(tetrahydropyran-2-yl)oxy]ethyloxy}indol-3-yl,
7-[(2-hydroxyethyl)oxy]indol-3-yl,
7-[2-(isopropoxy)ethyloxy]indol-3-yl,
7-[2-(methoxyethyl)oxy]indol-3-yl,

7-[(3-methoxypropyl)oxy]indol-3-yl,
7-[(3-methoxybutyl)oxy]indol-3-yl,
7-{[(N,N-diethylcarbamoyl)methyl]oxy}indol-3-yl,
7-(dimethylaminomethyl)-6-[(2-piperidin-1-yl)ethyloxy]indol-3-yl,
7-(dimethylaminomethyl)-6-[(2-homopiperidin-1-yl)ethyloxy]indol-3-yl,
7-(dimethylaminomethyl)-6-{2-[(tetrahydropyran-2-yl)oxy]ethyloxy}indol-3-yl,
7-(dimethylaminomethyl)-6-[(2-hydroxyethyl)oxy]indol-3-yl,
7-(dimethylaminomethyl)-6-[2-(isopropoxy)ethyloxy]indol-3-yl,
7-(dimethylaminomethyl)-6-[2-(methoxyethyl)oxy]indol-3-yl,
7-(dimethylaminomethyl)-6-[(3-methoxypropyl)oxy]indol-3-yl,
7-(dimethylaminomethyl)-6-[(3-methoxybutyl)oxy]indol-3-yl,
7-[(pyrrolidin-1-yl)methyl]-6-[(2-piperidin-1-yl)ethyloxy]indol-3-yl,
7-[(pyrrolidin-1-yl)methyl]-6-[(2-homopiperidin-1-yl)ethyloxy]indol-3-yl,
7-[(pyrrolidin-1-yl)methyl]-6-{2-[(tetrahydropyran-2-yl)oxy]ethyloxy}indol-3-yl,
7-[(pyrrolidin-1-yl)methyl]-6-[(2-hydroxyethyl)oxy]indol-3-yl,
7-[(pyrrolidin-1-yl)methyl]-6-[2-(isopropoxy)ethyloxy]indol-3-yl,
7-[(pyrrolidin-1-yl)methyl]-6-[2-(methoxyethyl)oxy]indol-3-yl,
7-[(pyrrolidin-1-yl)methyl]-6-[(3-methoxypropyl)oxy]indol-3-yl,
7-[(pyrrolidin-1-yl)methyl]-6-[(3-methoxybutyl)oxy]indol-3-yl,
6-[(2-homopiperidin-1-yl)ethyloxy]-7-azaindol-3-yl,
6-[(2-diethylamino-1-methyl)ethyloxy]-7-azaindol-3-yl,
6-{2-[(tetrahydropyran-2-yl)oxy]ethyloxy}-7-azaindol-3-yl,
6-[(2-hydroxyethyl)oxy]-7-azaindol-3-yl,
6-[2-(isopropoxy)ethyloxy]-7-azaindol-3-yl,
6-[2-(methoxyethyl)oxy]-7-azaindol-3-yl,
6-[(3-methoxypropyl)oxy]-7-azaindol-3-yl,
6-[(3-methoxybutyl)oxy]-7-azaindol-3-yl,
6-{[(N,N-diethylcarbamoyl)methyl]oxy}-7-azaindol-3-yl,
6-{4-(2-hydroxyethyl)piperazin-1-yl}methyl}indol-3-yl,
6-[(4-methylhomopiperazin-1-yl)methyl]indol-3-yl,
6-[(4-piperidinopiperidin-1-yl)methyl]indol-3-yl,
6-{[3-(isopropoxy)propyl]aminomethyl}indol-3-yl,

6-{[3,3-bis(ethyloxy)propyl]aminomethyl}indol-3-yl,
6-[(2,2-dimethyl-1,3-dioxolane-4-methane)aminomethyl]indol-3-yl,
6-{3-[(2-methoxyethyl)oxypropyl]aminomethyl}indol-3-yl,
6-{[3-(ethyloxy)propyl]aminomethyl}indol-3-yl,
6-[3-(butyloxy)propyl]aminomethyl]indol-3-yl,
6-[(3-methoxypropyl)aminomethyl]indol-3-yl,
6-(chloromethylcarbonyl)indol-3-yl,
6-[2-(isopropoxyethyl)aminomethylcarbonyl]indol-3-yl,
6-{[(2-piperidin-1-yl)ethyl]aminomethylcarbonyl}indol-3-yl,
6-{[(2-homopiperidin-1-yl)ethyl]aminomethylcarbonyl}indol-3-yl,
6-{4-(2-hydroxyethyl)piperazin-1-yl]methylcarbonyl}indol-3-yl,
6-{[(4-methylhomopiperazin-1-yl)]methyl}carbonylindol-3-yl,
6-[(4-piperidinopiperidin-1-yl)methylcarbonyl]indol-3-yl,
6-{[3-(isopropoxy)propyl]aminomethylcarbonyl}indol-3-yl,
6-{[3,3-bis(ethyloxy)propyl]aminomethylcarbonyl}indol-3-yl,
6-[(2,2-dimethyl-1,3-dioxolane-4-methane)aminomethylcarbonyl]indol-3-yl,
6-{3-[(2-methoxyethyl)oxypropyl]aminomethylcarbonyl}indol-3-yl,
6-{[3-(ethyloxy)propyl]aminomethylcarbonyl}indol-3-yl,
6-[3-(butyloxy)propyl]aminomethylcarbonyl]indol-3-yl, or
6-[(3-methoxypropyl)aminomethylcarbonyl]indol-3-yl.

Claims 27 – 35 (Cancelled)

Claim 36 (Original): A pharmaceutical composition comprising a compound of Claim 16 or a physiologically acceptable salt thereof and a pharmaceutically acceptable diluent or carrier.

Claim 37 (Previously Presented) The compound which is 2-(1-(4-acetoxybutyl)-7-azaindol-3-yl)methylene-2H-1,4-benzothiazin-3(4H)-one, or a physiologically acceptable salt thereof.

Claim 38 (Previously Presented) a pharmaceutical composition comprising the compound of claim 37, or a physiological salt thereof, and a pharmaceutically acceptable diluent or carrier.

